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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,314	06/08/2001	Lothar Wenzel	5150-53101	9350

7590 04/23/2003
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EXAMINER

LAU, TUNG S

ART UNIT	PAPER NUMBER
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2863

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/877,314

Applicant(s)

WENZEL ET AL.

Examiner

Tung S Lau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-12,14,16-23,25 and 27-33 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.

- 6) ☒ Claim(s) 1,3,8-12,14,19-21,23,25 and 30-32 is/are rejected.

- 7) ☒ Claim(s) 5-7,16-18,22,27-29 and 33 is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 12, 23, 3, 14, 25, 8, 9, 19, 30, 10, 11, 20, 21, 31 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Franck et al. (U.S. Patent 6,351,662).

Regarding claim 1:

Franck discloses a method for scanning for an object within a region, comprising scanning the region using a conformal scanning scheme (abstract), said scanning comprising performing a conformal mapping between a characteristic geometry of the region and a first scanning curve to generate a conformal scanning curve based on said characteristic geometry (fig. 5, col. 8, lines 29-35); and measuring the region at a plurality of points along the conformal scanning curve (fig. 5); determining one or more characteristics of the object in response to said scanning (fig. 5); and generating output indicating the one or more characteristics of the object (fig. 5).

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Regarding claim 12:

Franck discloses a system for scanning for an object within a region, comprising a sensor (fig. 5, section 562, col. 20, lines 23-38); and a computer which is operable to couple to said sensor (fig. 5), said computer comprising: a CPU; and a memory medium which is operable to store a scanning program (fig. 5); wherein said CPU is operable to execute said scanning program to perform scanning the region with said sensor using a conformal scanning scheme (fig. 5, 6), said scanning comprising performing a conformal mapping between a characteristic geometry of the region and a first scanning curve to generate a conformal scanning curve based on said characteristic geometry (col. 8, lines 29-35); and measuring the region at a plurality of points along the conformal scanning curve (fig. 5); determining one or more characteristics of the object in response to said scanning; and output indicating the one or more characteristics of the object (fig. 5).

Regarding claim 23:

Franck discloses a memory medium containing program instructions to scan for an object within a region, wherein said program instructions are executable to perform scanning the region using a conformal scanning scheme (col. 8, lines 29-35, fig. 5), said scanning comprising performing a conformal mapping between a characteristic geometry of the region and a first scanning curve to generate a conformal scanning curve based on said characteristic geometry (fig. 5, section 550, 540); and measuring the region at a plurality of points along the

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conformal scanning curve (fig. 5, section 550,540,); determining one or more characteristics of the object in response to said scanning; and generating output indicating the one or more characteristics of the object (fig. 5, section 610).

Regarding claim 3,14, 25:

Franck discloses the method, memory medium, system determining the characteristic geometry of the region prior to said generating the conformal scanning curve (fig. 4, section 420, fig. 5, 550, 540, fig. 5, section 430).

Regarding claim 8:

Franck discloses the method wherein the first scanning curve is comprised in a first geometry, wherein the first scanning curve comprises a subset of points in said first geometry (fig. 5, points 550, 540, 510), and wherein said performing a conformal mapping between said characteristic geometry and said first scanning curve comprises determining a mapping function which maps each point in the first geometry to a corresponding point in the characteristic geometry (col. 8, lines 29-35); and applying said mapping function to each point in said subset of points in said first geometry to generate a corresponding subset of points in said characteristic geometry (fig. 5, section 430), wherein said subset of points in said characteristic geometry comprises said conformal scanning curve (fig. 5, section 430).

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Regarding claims 9, 19, 30:

Franck discloses the method, memory medium, system wherein said measuring the region at a plurality of points along the conformal scanning curve produces data; wherein said determining one or more characteristics of the object in response to said scanning comprises examining said data (fig. 5, section 586, 588, fig. 5, section 430).

Regarding claims 10, 11, 20, 21, 31, 32:

Franck discloses the method, system, memory medium wherein scanning the region using conformal scanning scheme produces data indicative of the one or more characteristic of the objects (fig. 5, section 210) and wherein the determining one or more characteristic of the object in response to the scanning including examining the data (fig. 5, section 586, 588, 589), in one, two and three dimension (fig. 7, 8, 9)

Claim Objections

2. Claims 5, 6, 7, 16, 17, 18, 27, 28, 29, 22, 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitation of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: prior art fail to teach the curve minimizes angle deviations and curvature, the conformal curve

has a maximum curvature below a specified value, has a optimum scanning curvature, the region has a dimension greater than three.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

3. Applicant's arguments filed 2/21/2003 have been fully considered but they are not persuasive.

A. Applicant argues that the prior art does not teach the conforming mapping of the object. Franck discloses the conforming mapping of the object in fig. 5, col. 8, lines 29-35.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

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calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 703-305-3309.

The examiner can normally be reached on M-F 9-5:30.

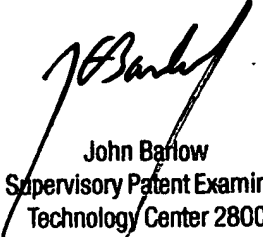
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 703-308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5841 for regular communications and 703-308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

TC2800 RightFAX Telephone Numbers : TC2800 Official Before-Final RightFAX - (703) 872-9318, TC2800 Official After-Final RightFAX - (703) 872-9319

TC2800 Customer Service RightFAX - (703) 872-9317

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